## I/WE CLAIM:

- 1. A network management system comprising:
  - a. network management logic;
  - a human-machine interface;
  - c. at least two view panes displayed on the human-machine interface, a first view pane displaying representations of OSI Layer 3 entities, a second view pane displaying representations of OSI Layer 2 entities, the OSI Layer 3 entities being provisioned over the OSI Layer 2 entities

wherein the combination of the displayed information in the at least two view panes provides for presentation of OSI Layer 2 entities corresponding to selected OSI Layer 3 entities.

- A network management system as claimed in claim 1, wherein the network management system is further adapted to query a managed object database storing connectivity information regarding field installed data transport equipment.
- 3. A network management system as claimed in claim 2, wherein querying the managed object database, the network management system is further adapted to extract layer-by-layer connectivity information regarding Layer-3 entity representations selected in the first view pane for display in the second view pane.
- 4. A network management system as claimed in claim 1, wherein the network management system is further adapted to inspect a containment hierarchy of instantiated manageable entity objects modeling field installed data transport equipment specifying connectivity information.

- 5. A network management system as claimed in claim 4, wherein inspecting the containment hierarchy of instantiated managed entity objects, the network management system is further adapted to extract layer-by-layer connectivity information regarding Layer-3 entity representations selected in the first view pane.
- 6. A network management system as claimed in claim 1, wherein the first and second view panes are further associated with a one of a segmented view window and two corresponding view windows.
- 7. A network management software application comprising:
  - a. network management logic;
  - b. a human-machine interface for display of connectivity information;
  - c. at least two view panes displayable via the human-machine interface, a first view pane displaying representations of OSI Layer 3 entities, a second view pane displaying representations of OSI Layer 2 entities, the OSI Layer 3 entities being provisioned over the OSI Layer 2 entities.

wherein the combination of the displayed information in the at least two view panes provides for presentation of OSI Layer 2 entities corresponding to selected OSI Layer 3 entities.

8. A network management software application as claimed in claim 7, wherein the network management software application is further adapted to query a managed object database storing connectivity information regarding field installed data transport equipment.

- 9. A network management system as claimed in claim 8, wherein querying the managed object database, the network management software application is further adapted to extract layer-by-layer connectivity information regarding Layer-3 entity representations selected in the first view pane for display in the second view pane.
- 10. A network management software application as claimed in claim 7, wherein the network management software application is further adapted to inspect a containment hierarchy of instantiated manageable entity objects modeling field installed data transport equipment specifying connectivity information.
- 11. A network management software application as claimed in claim 10, wherein inspecting the containment hierarchy of instantiated manageable entity objects, the network management software application is further adapted to extract layer-by-layer connectivity information regarding Layer-3 entity representations selected in the first view pane.
- 12. A network management software application as claimed in claim 7, wherein the first and second view panes are further associated with a one of a segmented view window and two corresponding view windows.